MARKETS AND APPLICATIONS

Pharmaceutical

Clean water is a crucial ingredient for many production processes in the Cosmetic and Pharmaceutical industry. bestUV has a dedicated product range for the specific sanitary demands that are applicable in these environments.

Waste water

bestUV systems can be found in the last process step of the wastewater treatment discharged by municipalities and industries before it can be safely released back into the natural environment. This market segment is characterized by the low transmission of the water

Industrial

In various industrial applications there is a need for clean water free of harmful pathogens. Many strict industry standards apply. bestUV systems are also used in treatment against biofouling in various cooling water processes.

Zoo and aquaria

bestUV provides UV disinfection systems for aquariums and zoo's effectively controlling pathogens, reducing algae growth, and maintaining optimal water quality, ensuring a healthy environment for aquatic life.

Maritime

In various applications on board of ships bestUV systems can be found such as Wastewater discharges, Pools and Drinking water systems. For the latter one bestUV has a dedicated range, all NIPH certified. Maritime applications demand extra ruggedness in design quality due to specific circumstances like vibrations and corrosion. bestUV has an extensive experience and installed base in this specific market.

Drinking water

bestUV offers a wide range of certified UV systems that guarantee full disinfection treatment according to the local Municipal demands including pathogens like Giardia and Crypotosporidium that have a high resistance against Chlorine.

Ballast water

bestUV Ballast Water Treatment UV systems are certified according to the challenging IMO and US Coast Guard Approvals. These unique compact UV systems are very effective in treatment in the challenging maritime circumstances.

Pools

bestUV systems are used for the breakdown of the unwanted chlora-mines in the water that are introdu-ced by the organic components from the bathers. Also the disinfection of chlorine resistent micro organisms is achieved.

Food and beverage

In order to guarantee food safety, clean water is a crucial ingredient. Treatment with bestUV UV systems specifically designed for these markets assures that the needed constant water quality will always be achieved.

Reuse

As freshwater supplies become more strained due to droughts, population growth, and industrial demand, the need for sustainable water management solutions is increasing. bestUV's advanced dedicated high capacity Reuse UV systems disinfect reclaimed water by eliminating pathogens, ensuring safe reuse for applications like irrigation and industrial processes.

Horticulture

bestUV systems are broadly used in the horticultural industry; especially in the drain water treatment and recycling of the consumed water. This market segment is characterized by the very low transmission of the water in combination with high UVC dose demands.

Ultra-Pure water

In industries such as Microelectronics and also some Pharmaceutical applications there is a need for ultra clean water with very low contamination of organic compounds (TOC). bestUV offers a dedicated high power UV product range generating the specific critical UVC wavelength of 185nm crucial for this process.

Aquaculture

Treating water against harmful pathogens is essential for a healthy environment in fish farming. BestUV delivers dedicated UVC product ranges tailored to the specific demands of these markets such as guaranteed performance against various pathogens, NVI, corrosion-resistant and maritime execution.



"ONE SOLUTION DOESN'T FILL ALL: bestUV TAILOR-MADE OPTIMAL UV SOLUTIONS TO YOUR UNIQUE NEEDS"

We understand the power of water best and know how important healthy water is. Whether it's drinking water, wastewater, process water or poolwater, we work enthusiastic every day to ensure the quality of your water.

High spare parts stock

Short lead/delivery times

Well trained & experienced personnel

Excellent service

OUR UV REACTORS

The bestUV product range covers a broad range of applications and therefore are available in numerous executions; L - I - S - U or Z shape in/outlet connections, standard in high grade stainless steel 316L but all products can also be executed in Duplex or corrosion free HDPE. Manually or fully Automatic operated wiping system. Various sensor possibilities including the quartz sleeve mounted and wiped 360° look around sensor.

OUR UV CABINETS

For each system there is a dedicated cabinet which can also be equipped in many optional executions: various HMIs varying from the basic Lambda 1 controller up till the advanced wide screen Lambda 7 controller, magnetic or electronic power supplies, wall mounted or free standing, fixed or dimmable lamp power.

OUR CERTIFICATES

Our Lloyds ISO9001 certified management system underscores our dedication to quality assurance.

Thanks to our in-house CFD design capabilities in combination with extensive bioassay testing know how we excel in customizing optimal systems tailored to meet specific requirements and still deliver the prescribed guaranteed performance.

bestUV

experts in ultraviolet light



bestUV systems

Expertise & Know-How

With expertise in Microbiology, UV lamp technology, CFD, Electrical/Mechanical engineering, Manufacturing and a broad Water Application know-how bestUV ensures effective disinfection for its partners.

Versatile Water Solutions

bestUV has a broad product range that covers a wide range of flows, water qualities and specified disinfection rates. Based on every specific need bestUV can select the right product for the optimal customer solution.

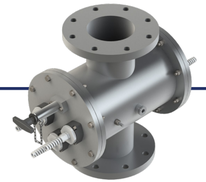
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bestUV SYSTEMS

Contact the 'experts in ultraviolet light' to fully optimise your new or existing water treatment system with bestUV technology.



ALFALINE UV

This most compact UV system range is designed for all types of water treatment. The so-called 'I -shape', where the water's inlet and outlet are in one line, results in low headloss and very easy installation in new or existing pipelines.

The high power Medium-Pressure UV lamps are compact and emit a broad spectrum of wavelengths.

MP

AlfaLine UV systems prevent fouling of the quartz sleeves and UV sensor with an effective manual or electrical 'anti-fouling mechanism'.

The Power Control System (PCS) enables the UV lamps to run at the most optimal setting to save energy and increase lamp life. This reduces operational costs and increases your return on investment.

The Lambda PLC controller ensures optimal operation of the AlfaLine UV. It provides the operator with valuable information about inputs and outputs, actual UV dose, UV intensity, lamp and system running hours, 4-20mA UV output, maintenance, warnings and alarms. The controller can also be equipped with a BUS-connection to communicate with an external master PLC.



BETALINE UV

BetaLine UV is a series of flexible Low-Pressure UV units. The BetaLine UV series uses low-pressure high output UV lamps which are available in different lengths, emitting a narrow band of 254nm wavelength; varying in power from 75 watt up to even 25kW per system. Standard execution is 'L -shaped': inlet and outlet are positioned at 90° but also Z-,S- and U-shaped in/outlet connections are possible.

Smart design positions the maintenance end flange on top of the UV chamber, so BetaLine UV maintenance is very simple and requires only basic skills. A maintenance engineer can easily reach components for removal or replacement.

LP LP LP

HO 185nm

BetaLine UV systems fouling of quartz sleeves and UV sensor are prevented by an effective manual or electrical operating 'anti-fouling mechanism'. Even the smallest BetaLine UV unit can be equipped with an electrical anti-fouling mechanism, which is unique on the market.

Depending on the type of BetaLine UV system and the application, it can be installed with a simple or high-tech PLC controller. The user-friendly Lambda controllers ensure the BetaLine UV system operates correctly and efficiently.



BETALINE-ECO UV

The BetaLine-ECO series uses unique highest-efficiency amalgam low-pressure UV lamps called ECO*light*. The lamps emit germicidal wavelengths at 254nm.

The extremely compact ECO*light* lamps are 'state-of-the-art' low-pressure lamps, especially developed by bestUV for use in BetaLine-ECO UV systems. The lamplife is very long; this in combination with the very high UVC efficiency results in the fact that the operational costs are relatively low compared to traditional UV lamps.

As a result of bestUV's integral development of the BetaLine-ECO and the ECO*light* lamp the BetaLine-ECO is the most compact 'L -shaped' system available on the market today.

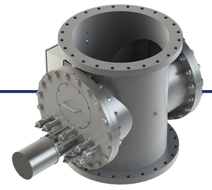
LP LP

ECO 185nm

The BetaLine-ECO UV systems are biodosimetric tested and certified for drinking water. The complete drinking water range is certified including the quartz sleeve wiping option even for the smallest UV, which is unique on the market. The result is no fouling of the protecting quartz sleeves, which greatly reduces any UV light loss.

The CFD (Computational Fluid Dynamics) designed and biodosimetric approved BetaLine-ECO provides optimal protection against pathogens, delivering the highest performance for lowest operational costs.

The official approvals allow the BetaLine-ECO to be used in larger waterworks and smaller drinking water facilities to protect consumers against waterborne pathogens, including most bacteria *(E.coli, Legionella, Vibrio, Pseudomonas, Klebsiella)*, viruses (Poliovirus, Rotavirus), parasites (*Cryptosporidium, Giardia*) and bacterial spores *(Bacillus, Clostridium)*.



DELTALINE UV

The compact DeltaLine UV series features 'in-one-line' positioning of the inlet and outlet connections resulting in compactness of the system and a very low headloss. The UV lamps are high power Medium-Pressure polychromatic types which emit wavelengths between 200 and 400nm. The lamps are positioned perpendicularly to the flow.

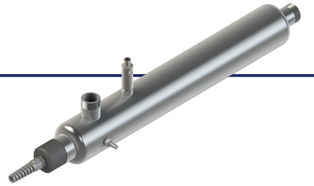
DeltaLine UV systems are typically used in low UVC transmittance (high-absorbance) and/or high reduction water applications, such as wastewater (both communal and industrial) and aquaculture.

MP

The centrally positioned sensor in a quartz sleeve monitors the correct output of all the multiple lamps in the DeltaLine. An automatic motor-driven cleaning device, which prevents fouling of lamps and UV sensor quartz sleeves is standard with the DeltaLine UV system.

The CFD (Computational Fluid Dynamics) designed and bioassay tested DeltaLine UV provides optimal protection against waterborne human and plant pathogens, including bacteria, moulds, protozoa and viruses.

The DeltaLine range covers validated flows up to capacities of 6000 m³/h for a single system. There are even DeltaLines installed with a total lamp power up to half a MegaWatt for a single system!



GAMMALINE UV

The GammaLine UV series is the most simple and basic UV system available from bestUV. The control cabinet features an hour counter. Although its simplicity, of course it also features bestUV's industrial building quality.

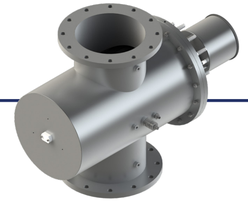
The 'L -shaped' design makes the installation of GammaLine UV very simple. The chamber can be installed easily in a main or bypass pipe, horizontally or vertically, allowing for 360° turning around the inlet axis.

The robust construction of the GammaLine UV means it performs reliably in demanding settings, such as a ship's machine room with high vibrations.

The GammaLine UV series uses low-pressure UV lamps which are available in different strengths and emit the 254nm wavelength. Parts can be replaced by hand; no tools are needed.

LP

The GammaLine UV system offers a UV sensor (4-20mA) option to continuously monitor UV lamp output.



KAPPALINE UV

KappaLine UV series is the most forward-looking UV system available in the market today. It features 'in-one-line' positioning for the inlet and outlet connections and perpendicularly positioned, ultra compact low-pressure UV amalgam lamps, called ECOlight. This unique combination of extreme compactness, lowest headloss and highest efficiency makes it stand out as the only system available in the market that combines all the advantages of both medium- and low-pressure systems.

The highest-efficient ECO*light* lamps emit germicidal wavelengths at 254nm and are specially developed by bestUV for use in the compact KappaLine UV systems.

LP

ECO

The total floor space needed for a KappLine installation is by far the smallest in the market, not only due to that compactness of the system itself but also due to the limited service area necessary to replace the compact lamps.

The KappaLine UV systems are 3rd party biodosimetric tested and certified for drinking water.

These official approvals allow the KappaLine UV to be used in larger waterworks and drinking water facilities to protect consumers against waterborne pathogens, including bacteria, viruses, parasites, protozoa *(Cryptosporidium, Giardia)* and bacterial spores.

The KappaLine UV is officially tested and approved with a cleaning device to prevent fouling of the protecting quartz sleeves, greatly reducing UV light loss.

The CFD (Computational Fluid Dynamics) designed and biodosimetric approved KappaLine UV provides optimal protection against pathogens, delivering the highest performance for the lowest operational costs.

LP Low pressure UVC lamp

LP HO Low pressure high output UVC lamp

LP ECO ECO*light* Compact, highest-efficiency

LP 185nm 185nm UVC lamp

MP Medium pressure UVC lamp